

1 / 13

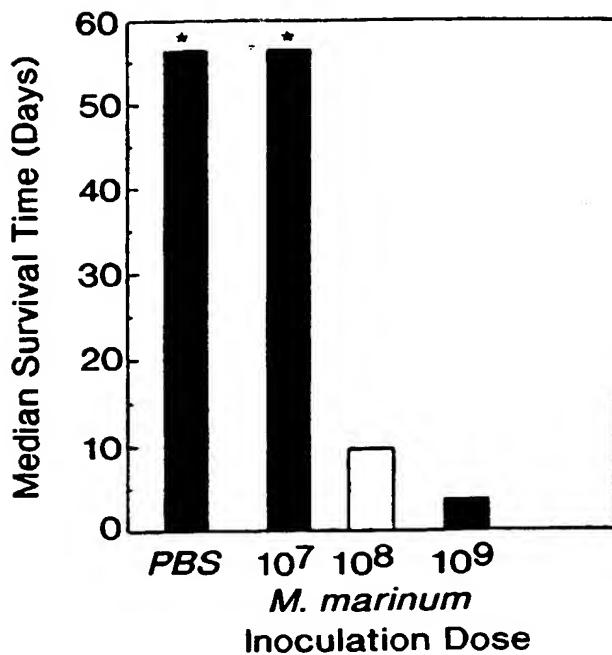


FIG. 1

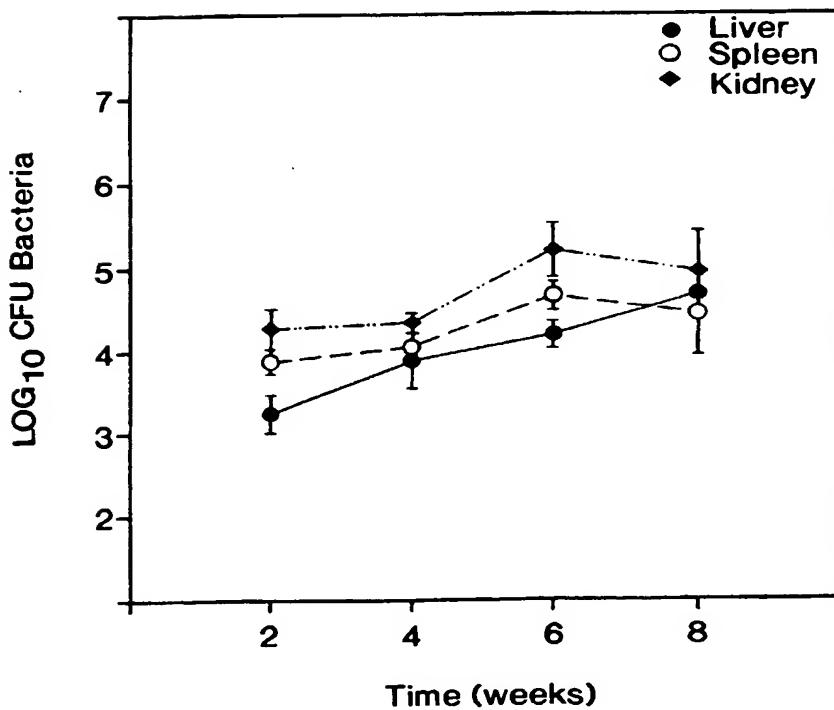


FIG. 2

2 / 13

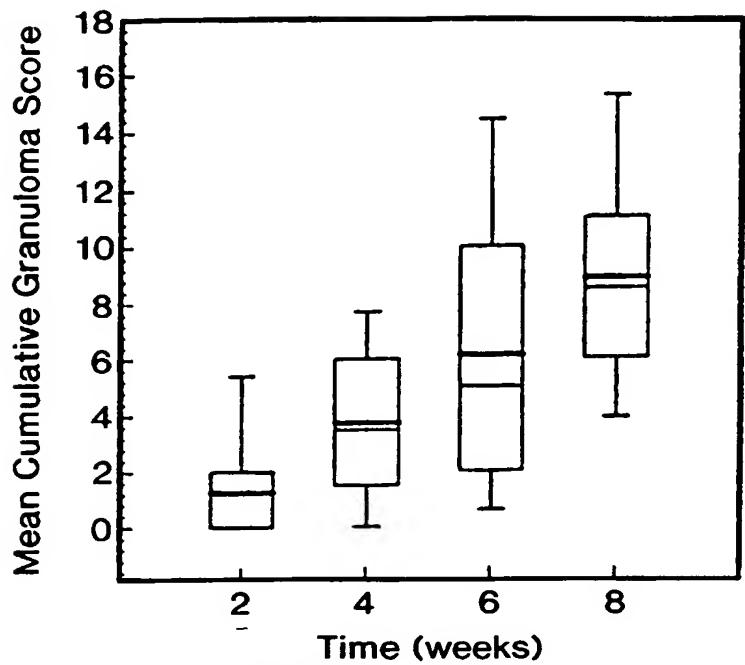


FIG. 3

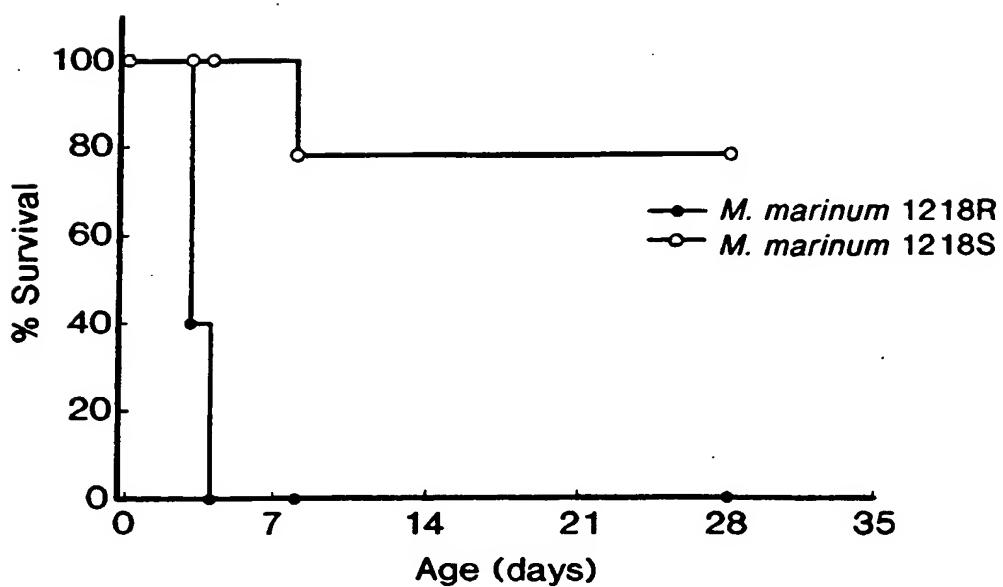
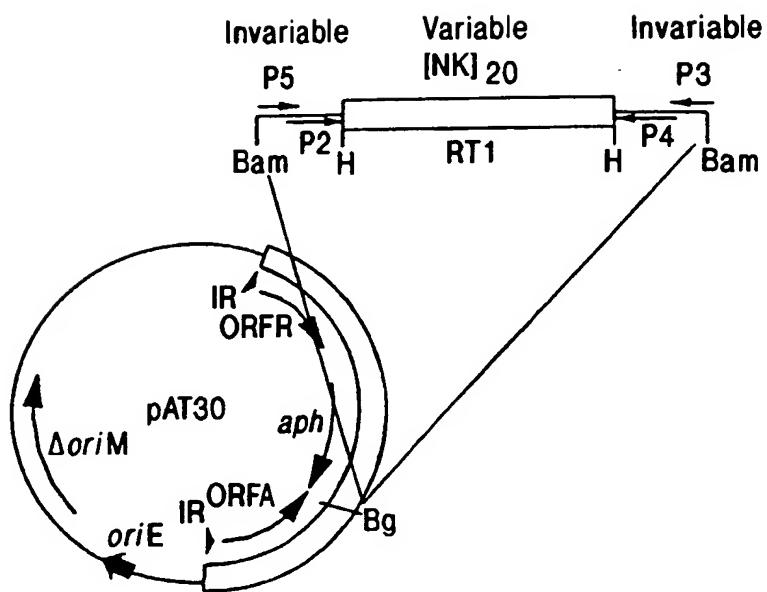
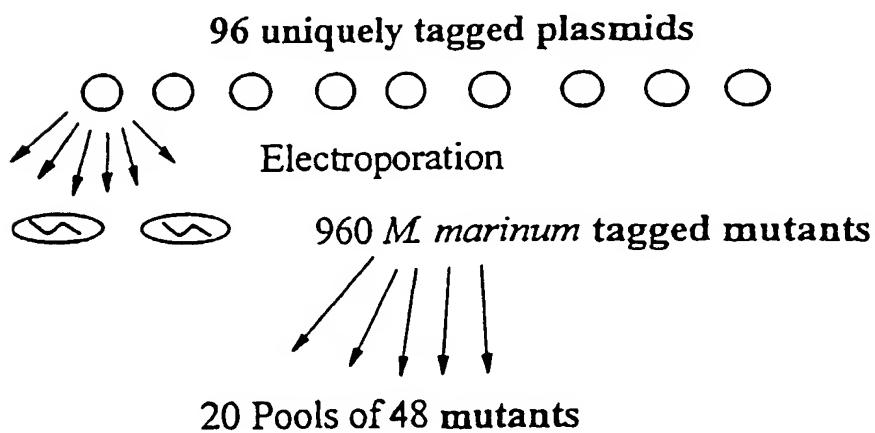


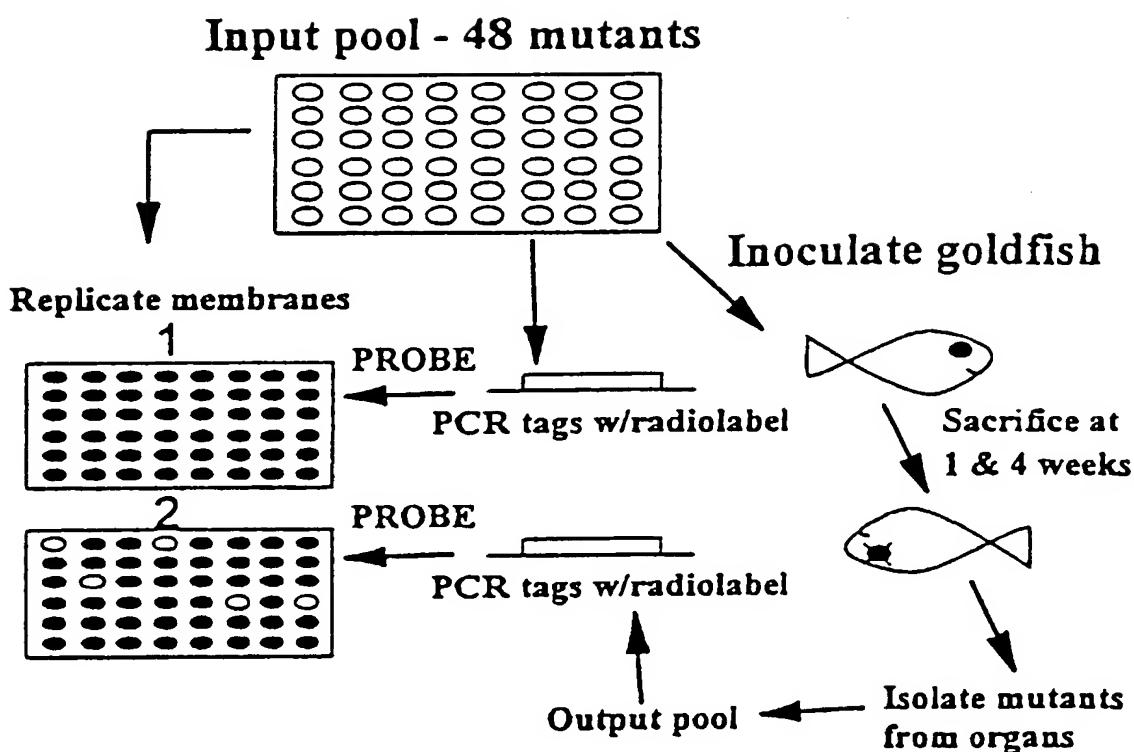
FIG. 4

3 / 13

**FIG. 5**

### Construction of *M. marinum* signature-tagged mutant library

**FIG. 6**

**FIG. 7**

5 / 13

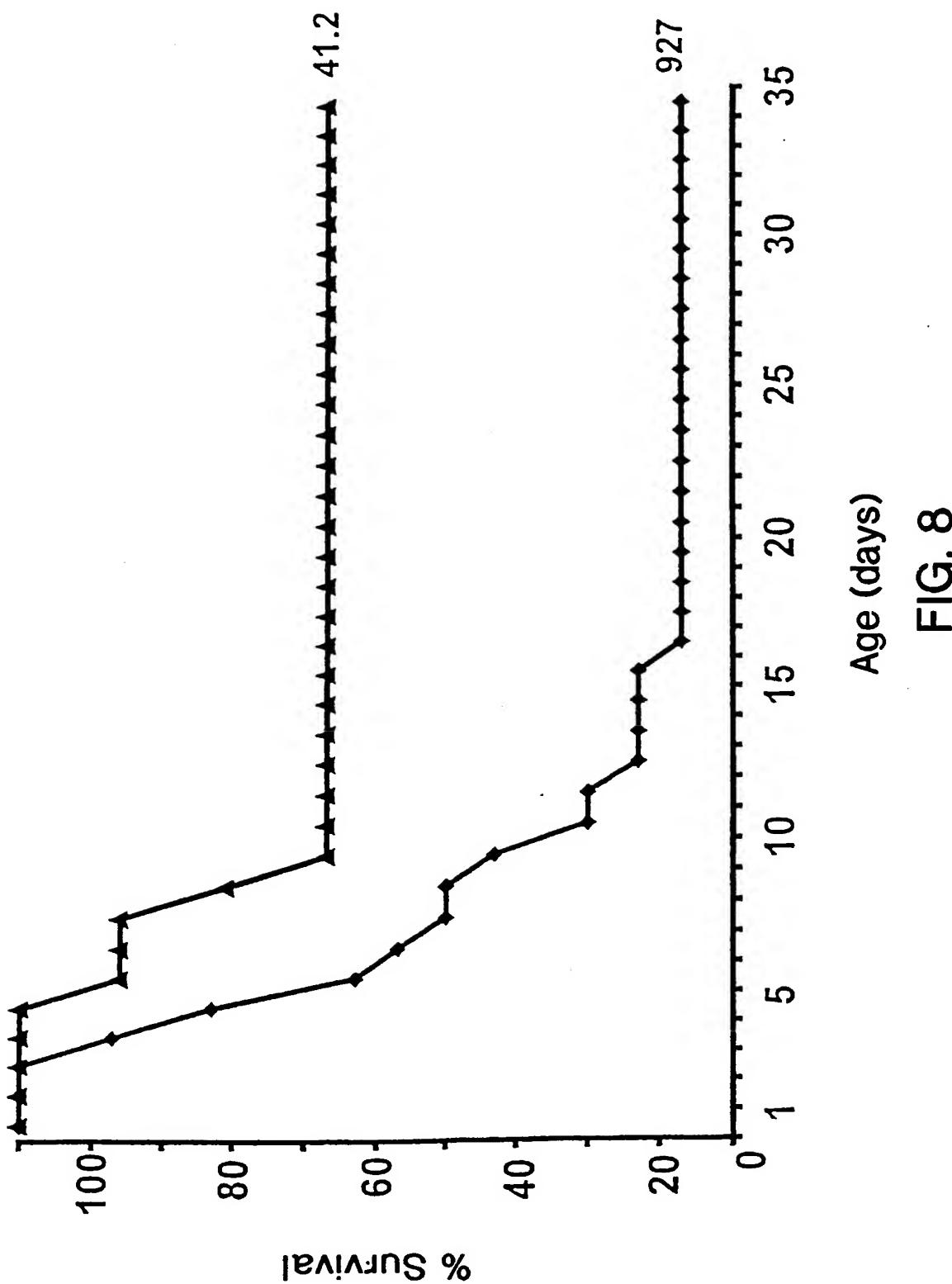


FIG. 8

6 / 13

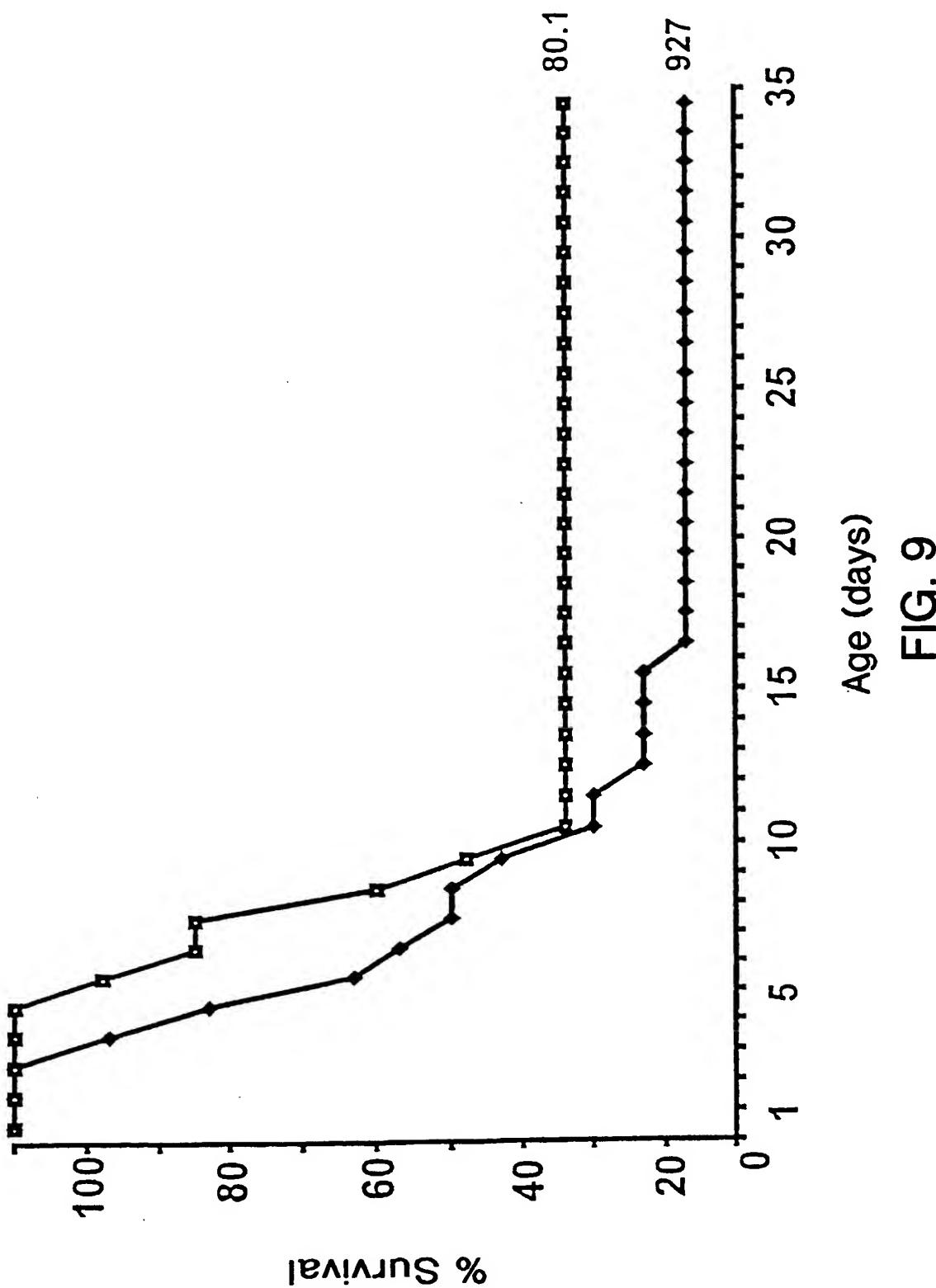


FIG. 9

7 / 13

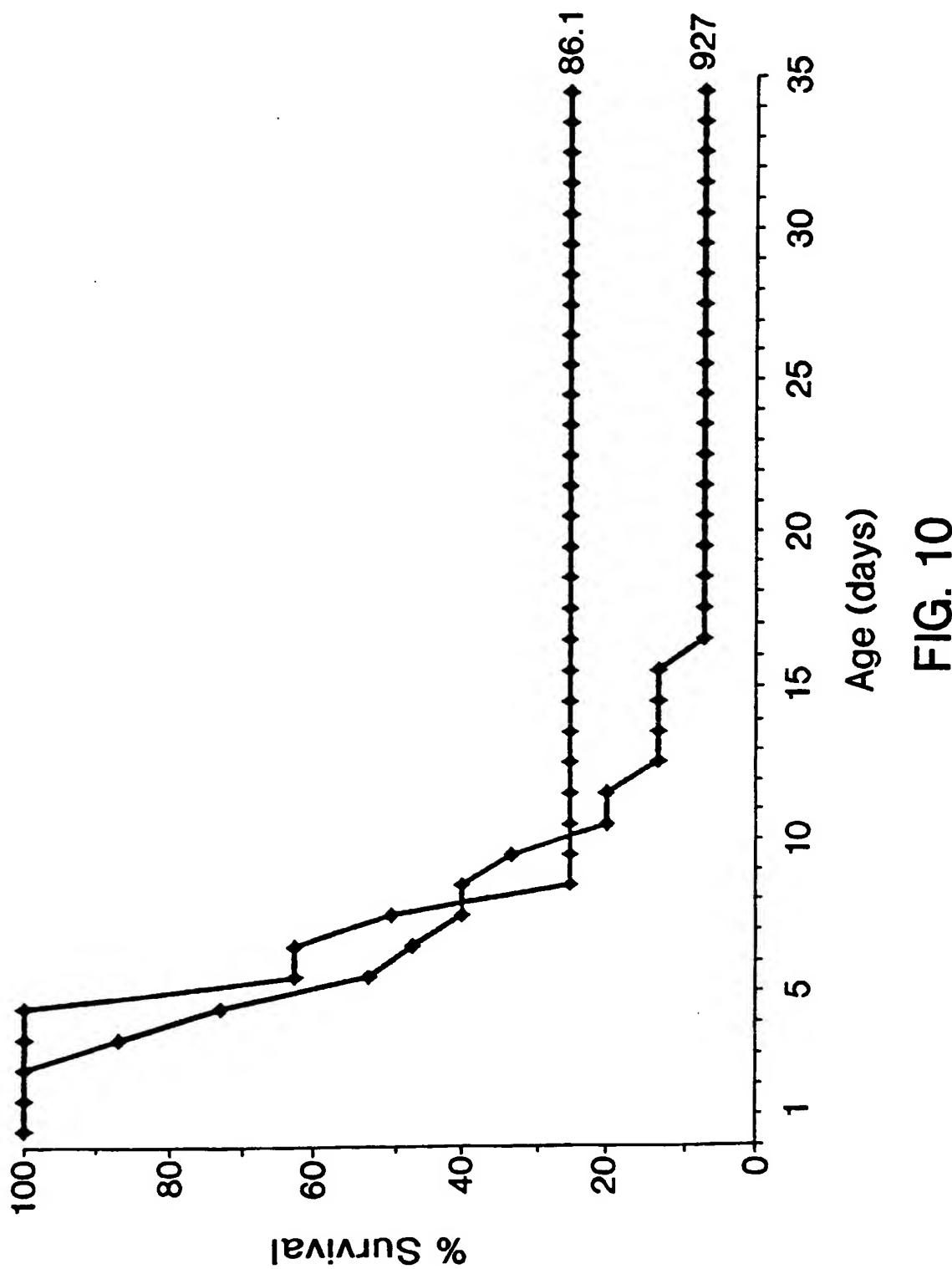


FIG. 10

# Amplification of genomic DNA Sequences flanking insertion sequences

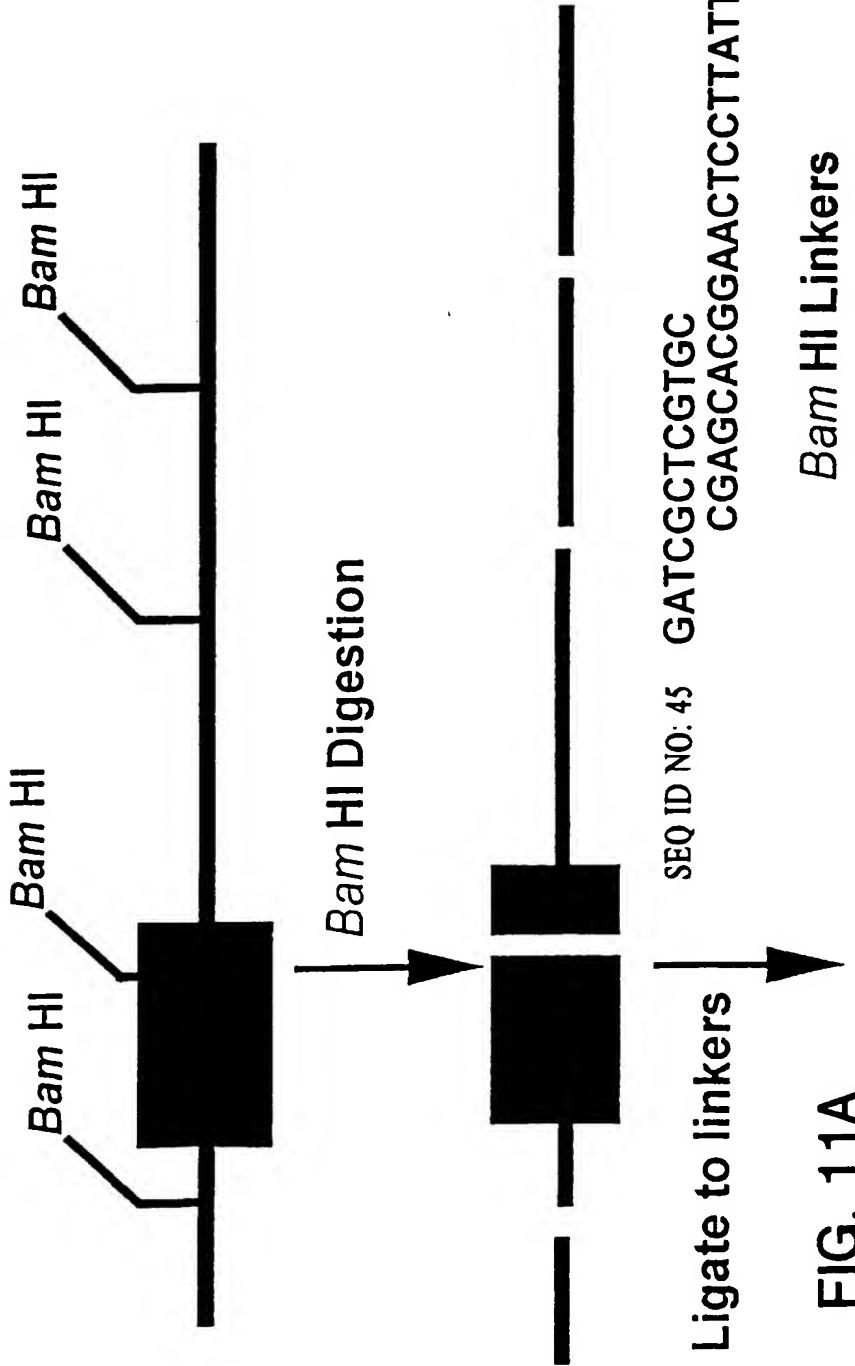


FIG. 11A

## Ligation-mediated PCR

## Amplification

...TTATTCCCTCAAGGCACCGAGGAGATCC  
GATCGCTCGTGC SEQ ID NO: 45

(SEQ ID NO: 46)

CCTAGCGAGGCACGGAAACTCCTTATT...  
G — [REDACTED]

...TTATTCTCAAGGCACGAGGATCC  
GATCGCTCGTGC

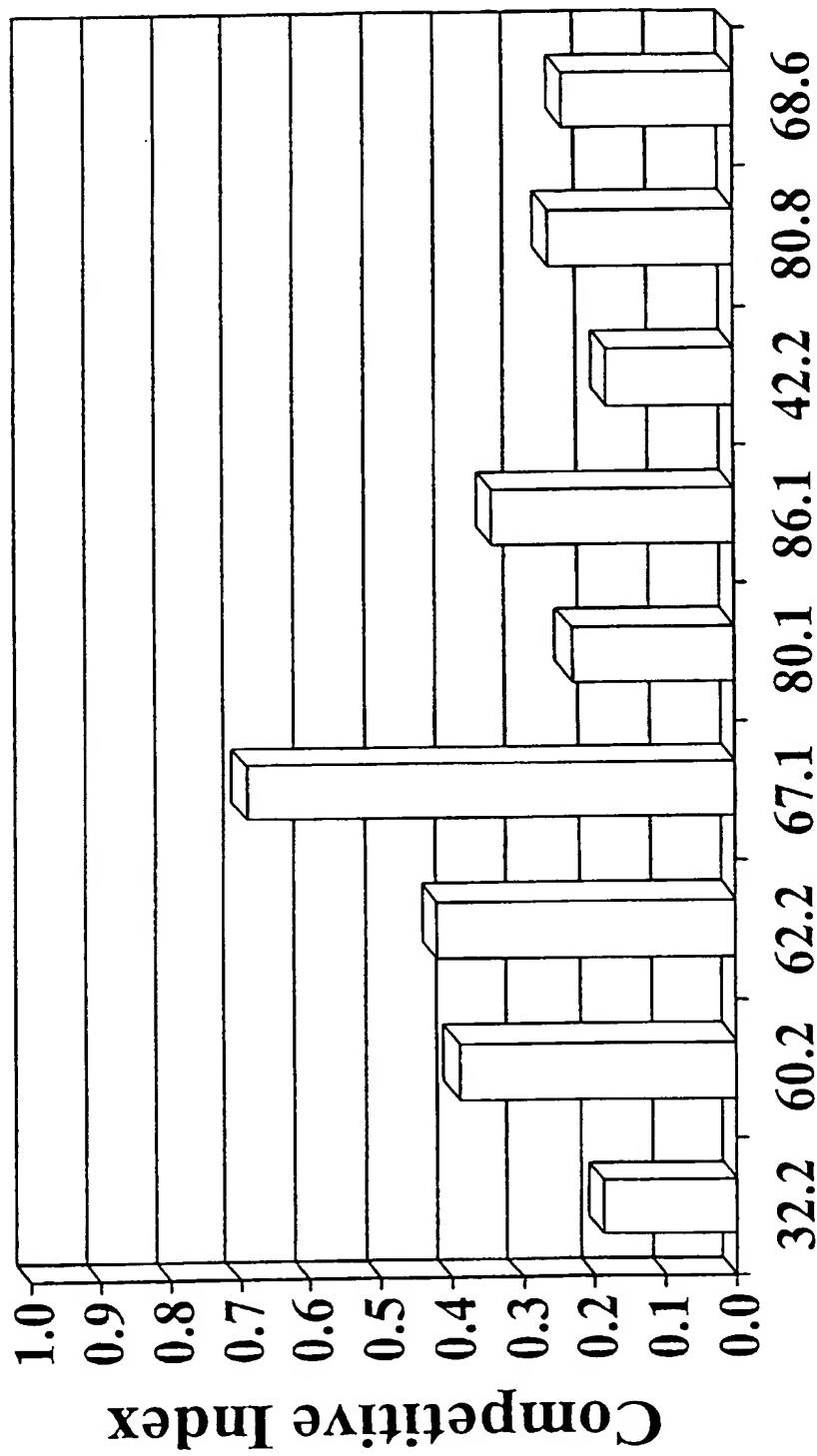
CGTGCTCGCTAG  
G — CCTAG CGAGGCACGGAACTCCATT...

**FIG. 11B**

## No Amplification

10/13

# Competitive Index: Mutant/Wild type

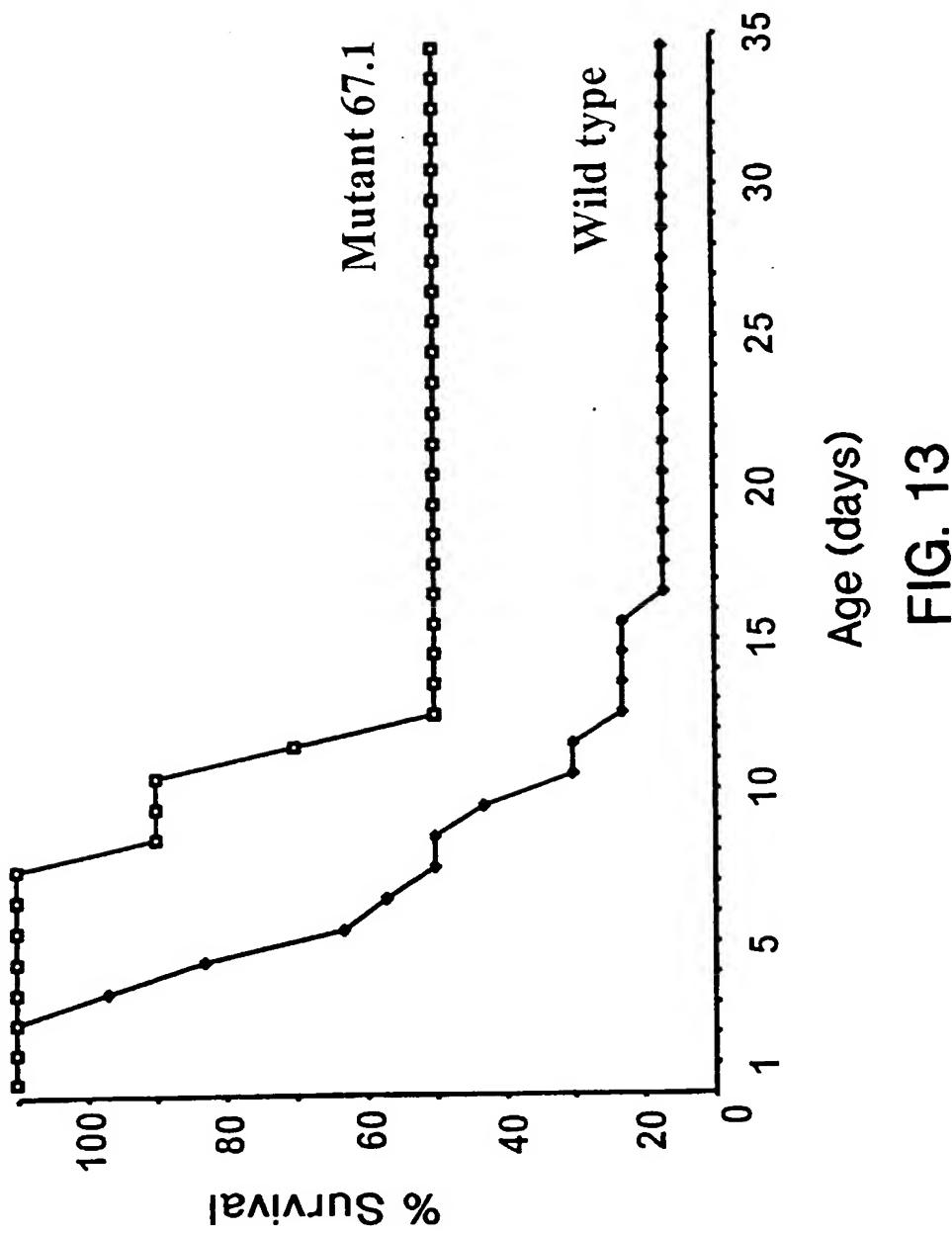


Mutant strain

FIG. 12

11 / 13

## Survival Curve: *M. marinum* Strains in Goldfish



**FIG. 13**

12 / 13

## Survival Curve: *M. marinum* Strains in Goldfish

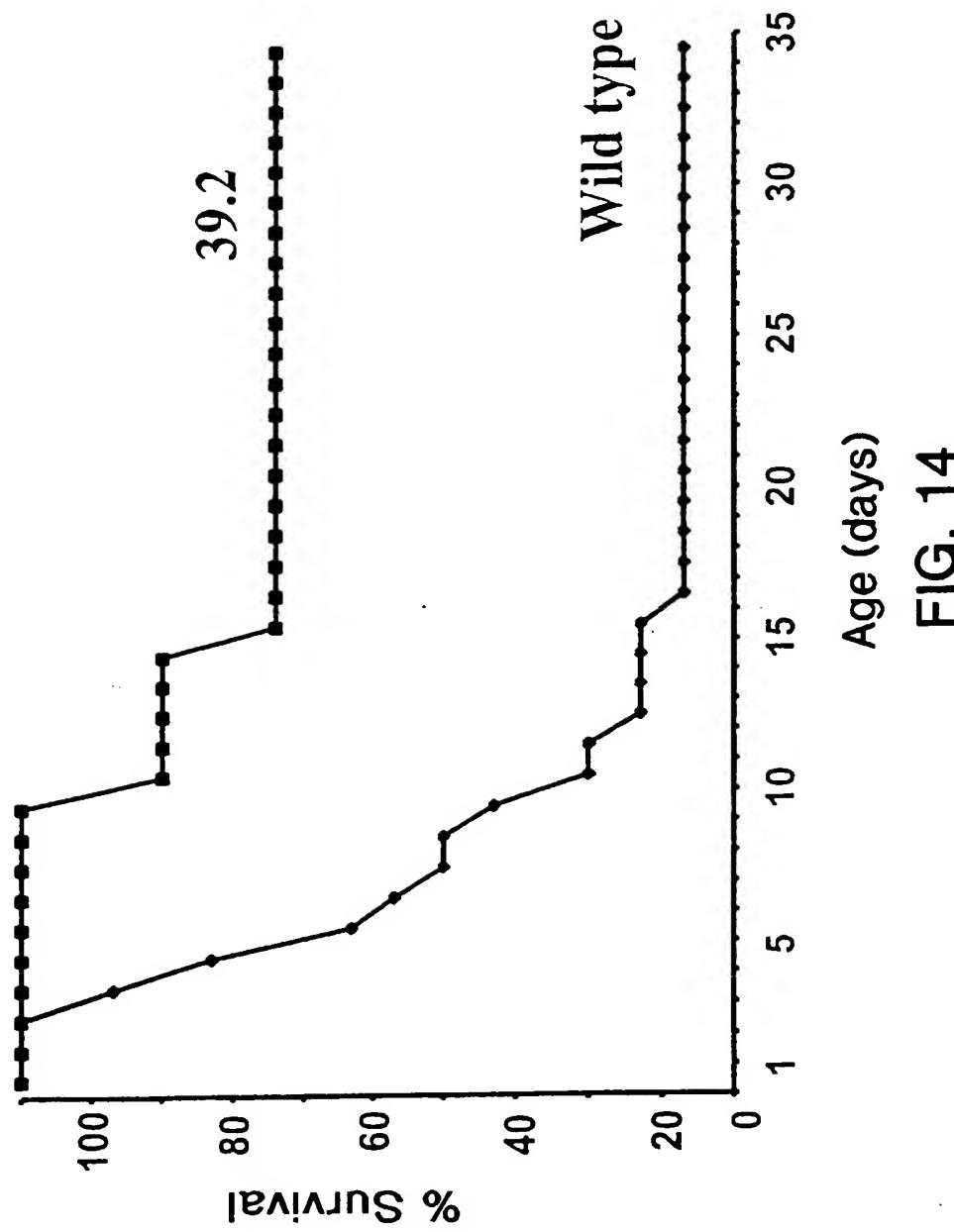


FIG. 14

13 / 13

## Survival Curve: *M. marinum* Strains in Goldfish

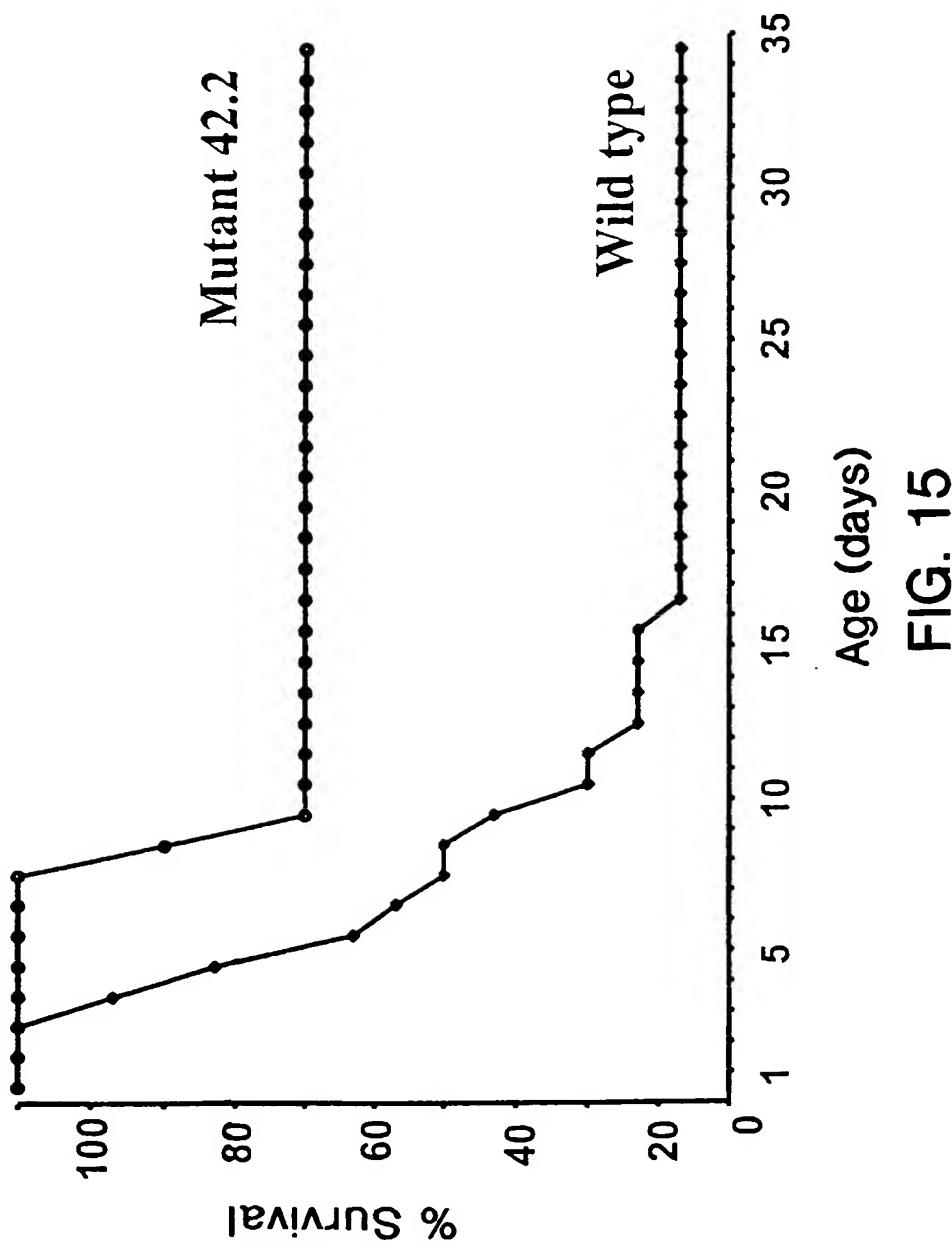


FIG. 15